5

10

15

20



## ABSTRACT

An image forming apparatus includes a light beam generating and modulating device which generates and modulates a light beam in accordance with an image signal, a light beam deflecting device which deflects the modulated light beam and scans an image carrier so as to form an image.

a pair of light beam detecting device is provided to detect the light beam deflected by the deflecting device at two separate positions on a main scanning line. The pair of light beam detecting device generates both of a reference time difference and at a prescribed temperature and a time difference to be compared with the reference time difference in a prescribed timing during image formation. A time difference measuring device is provided to measure a time difference between time periods when the light beam is detected by one of the light beam detecting devices and when that is detected by the other of light beam detecting devices. magnification correcting device is also provided to change a write clock frequency of the light beam and the rotation number of the light deflecting device in accordance with the time difference so as to correct magnification error in the main scanning direction of the image on the image carrier. visualizing device is provided to visualize the image on the image carrier written by the light beam.